

We Claim

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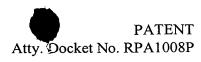
- 1. A kit for carrying out a nucleic acid amplification reaction, wherein said kit comprises a pair of primers, wherein a least one primer of said pair contains a modified nucleotide within the three 3' terminal nucleotide positions; wherein said modified nucleotide is selected from the group consisting of 2'-O-methyl nucleotides, 2'-fluoro-nucleotides, 2'-amino nucleotides, and arabinose nucleotides.
- 2. A kit of claim 1, wherein said modified nucleotide is a 2'-O-methyl nucleotide.
- 3. A kit of claim 1, wherein said modified nucleotide is a 2'-fluoro-nucleotide.
- 4. A kit of claim 1, wherein said modified nucleotide is a 2'-amino nucleotide.
 - 5. A kit of claim 1, wherein said modified nucleotide is an arabinose nucleotide.
- 20 6. The kit of claim 2, wherein said modified nucleotide is at the 3' terminal position.
 - 7. The kit of claim 3, wherein said modified nucleotide is at the 3' terminal position.
 - 8. The kit of claim 4, wherein said modified nucleotide is at the 3' terminal position.
- 9. The kit of claim 5, wherein said modified nucleotide is at the 3' terminal position.

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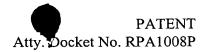




- 10. A kit of claim 1, wherein each primer of said pair of primers independently contains a modified nucleotide within the three 3' terminal nucleotide positions; wherein said modified nucleotide is selected from the group consisting of 2'-O-methyl nucleotides, 2'-fluoro-nucleotides, 2'-amino nucleotides, and arabinose nucleotides.
- 11. A method for amplifying a nucleic acid target sequence, wherein said method comprises carrying out a primer-based amplification reaction in a reaction mixture comprising a pair of primers, wherein a least one primer of said pair contains a modified nucleotide within the three 3' terminal nucleotide positions; wherein said modified nucleotide is selected from the group consisting of 2'-O-methyl nucleotides, 2'-fluoro-nucleotides, 2'-amino nucleotides, and arabinose nucleotides.
- 12. The method of claim 11, wherein said modified nucleotide is a 2'-O-15 methyl nucleotide.
 - 13. The method of claim 11, wherein said modified nucleotide is a 2'-fluoro-nucleotide.
- 20 14. The method of claim 11, wherein said modified nucleotide is a 2'-amino nucleotide.
 - 15. The method of claim 11, wherein said modified nucleotide is an arabinose nucleotide.
 - 16. The method claim 12, wherein said modified nucleotide is at the 3' terminal position.
- 17. The method claim 13, wherein said modified nucleotide is at the 3' terminal position.

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- 18. The method claim 14, wherein said modified nucleotide is at the 3' terminal position.
- 19. The method claim 15, wherein said modified nucleotide is at the 3'5 terminal position.
 - 20. A method of claim 11, wherein each primer of said pair of primers independently contains a modified nucleotide within the three 3' terminal nucleotide positions; wherein said modified nucleotide is selected from the group consisting of 2'-O-methyl nucleotides, 2'-fluoro-nucleotides, 2'-amino nucleotides, and arabinose nucleotides.